

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

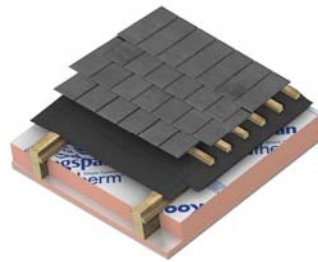
Kingspan Kooltherm K107

Description of Product

Kingspan Kooltherm K107 is a rigid board insulation that is designed to be used for tiled or slated pitch warm and cold roof spaces. It can be installed in a number of timber roof construction types and can be placed above, between and below rafters and also within vertical stud walls to roof voids and between ceiling joists.

The board can be used to form a "warm" unvented roof system or a "cold" vented roof system.

The product is manufactured in thicknesses ranging from 25mm-160mm, has a thermal conductivity of 0.018 W/m²K and is manufactured with a blowing agent that has zero depletion potential and low global warming potential.



Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Hygiene, health and environment
- Safety in Use
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 16th June 2017 and is valid until 18th November 2019

Issue Dated 16th June 2017

Scope of Registration

The Kingspan Kooltherm K107 is registered as a "Pitched Roof Insulation Board" that is suitable for use in a variety of timber roof types constructed traditionally or truss design. The product can also be placed between or over the timbers to form either a "Warm" or "Cold" roof system.

Kooltherm K107 is a foil-composite faced phenolic foam board for use in new warm roof constructions where the ceiling follows the pitch of the roof and encloses a habitable space

With regards to durability, if correctly installed, this product will have a life equivalent to that of the roof structure in which it is incorporated.

The products ability to limit interstitial and surface condensation has been assessed in line with information provided within the products BBA certification.

The thermal performance of the product can contribute to the required u-values within the Scottish Building Regulations.

Conditions of Certificate

The product can be affected by the correct installation for each roof type.

It is therefore important that each board application is installed as per the manufacturer's requirements to avoid a reduction in both thermal and structural performance.

Measures must be taken to ensure and maintain the roof structural performance where the insulation is placed above the rafters, geographical location must be checked for wind and snow loadings and appropriate calculations made.

For Scotland purposes:

The specifications and materials referred to have been assessed in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 1 October 2015.

Where reference is made on a plan or specification document to any Code of Practice, British or European Standard or manufacturer's instruction it shall be construed as a reference to such publication in the form in which it is in force at the date of this Registered Detail.

The materials specified shall be for purposes of this Registered Detail and should not be changed without first gaining approval so to do from Local Authority Building Standards Scotland [LABSS]. Failure to do so will invalidate the Registered Detail.

The Registered Detail shall be valid for a period of 12 months from the date of issue or until otherwise invalidated by formal notice by LABSS. The Registered Detail may be re-validated after 12 months following a request and payment of an

annual renewal fee from the Registered Detail Holder.

This Registered Detail should not be regarded as a formal approval under the building warrant process prescribed by the Building (Scotland) Act 2003 enacted from 1 May 2005

This Registered Detail shall contribute to compliance with relevant Mandatory Standards specified under the Building (Scotland) Regulations 2004 as amended when read with the scope, conditions and regulations sections to this Registered Detail.



LABC consider that, Kingspan Kooltherm K107 will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;

The Building Regulations 2010 (as amended) England & Wales

Regulation 7 Materials and workmanship

Note: The product is acceptable.

AD A1 Loading

Note: There are no structural implications with the product or fixings when installed between or below rafters, however when placed over rafters particular care should be taken on the geographical location and the effects of wind loading. The wind loading should be checked to BS6399-2:1997 and snow loadings should be calculated to BS6399-3:1988. Fixing spacing's should be calculated to BS5268-2:2002. Kingspan Insulation will assist with the calculation process if required. Structural bracing to roof members is a requirement, however tightly fitted boards do offer assistance to the buckling and racking strength of a roof but again this benefit should not be solely relied on.

AD B3 Internal fire spread (structure)

Note: The effects of a fire on the product within a roof space is unlikely to have any detrimental impact on the material and will remain contained within protective linings until the roof structure is destroyed. The boards will also will not present a smoke or toxic hazard if exposed to fire.

AD C2 Resistance to Moisture

Note: The product offers excellent moisture resistance and would not be damaged by the occasional wetting from a broken tile or leak in the roofing surface. To overcome any condensation issues the boards should be overlaid with an approved breathable membrane as per the manufacturer's instructions, also internal linings should be suitable to resist moisture transfer into the roof space.

AD L1A Conservation of fuel and power

Note: The product has a thermal conductivity of 0.018 W/m²K and one of the thinnest insulation products for a required U-Value and is manufactured with a blowing agent that has zero depletion potential and low global warming potential.



The Building Regulations 2010 (as amended) England

AD L1A Conservation of fuel and power

Note: The product has a thermal conductivity of 0.018 W/m²K and one of the thinnest insulation products for a required U-Value and is manufactured with a blowing agent that has zero depletion potential and low global warming potential.



The Building Regulations 2010 (as amended) Wales

AD L1A Conservation of fuel and power

Note: The product has a thermal conductivity of 0.018 W/m²K and one of the thinnest insulation products for a required U-Value and is manufactured with a blowing agent that has zero depletion potential and low global warming potential.



The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks Domestic and Non-Domestic

Regulation 8 Durability, workmanship and fitness of materials

0.8.5: Ways of establishing the fitness of materials

Regulation 9 Building Standards applicable to construction

Note: Construction shall be carried out so that the work complies with the applicable requirements of schedule 5.

Mandatory

Standard 3.15 Condensation

Note: When used in conjunction with an appropriate vapour control layer this product can satisfy this Standard with reference to clauses 3.15.1, 3.15.3 and 3.15.4 of the Domestic Technical Handbook, please refer to sections 9.1 and 9.7 of the BBA certificate

Mandatory

Standard 6.1(b) Carbon Dioxide Emissions

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Mandatory

Standard 6.2 Building Insulation Envelope

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Non-Regulatory Information



LABC Warranty

LABC Warranty conditionally accepts the use of Kooltherm K107 when installed and used in accordance with the Scope and Conditions of this Certificate. Visit www.labcwarranty.co.uk for our LABC Warranty Technical Manual requirements and Warranty conditions of acceptance.

Supporting Documentation

BBA Agreement Certificate 16/5299 Product Sheet 3 Issue Date 1st March 2017

Kingspan Data Sheet First Issue April 2017

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